NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FACT SHEET

Permittee's Name:	The Santa Ynez Band of Chumash Indians Wastewater Treatment Plant
Mailing Address:	P.O. Box 517 Santa Ynez, California 93460
Plant Location:	3400 East Highway 246 Santa Ynez, California 93460
Contact Person(s):	Vincent Armenta, Chairman
NPDES Permit No.:	CA0050008

I. Status of Permit

The Santa Ynez Band of Chumash Indians, the owners of the Santa Ynez Band of Chumash Indian wastewater treatment plant, applied for a new National Pollutant Discharge Elimination System (NPDES) permit allowing the discharge of treated effluent from their wastewater treatment plant, in Santa Barbara County, California, to Zanja de Cota Creek, eventual tributary to the Santa Ynez River, a waters of the United States located in Santa Barbara County in California.

The applicant submitted a complete application on July 24, 2002 through its consultants for the project John L. Wallace & Associates (JLWA).

II. General Facility Information

The Santa Ynez Band of Chumash Indian wastewater treatment plant has a design capacity of 200,000 gallons per day (gpd). It is a tribally-owned wastewater treatment plant that receives domestic wastewater from approximately 350 residents on the reservation and from a 190,000 square feet casino complex and miscellaneous administration buildings. Approximately 5,100 patrons a day visit the casino complex, making the total population served on an average to be 5,450. Currently, the plant would treat approximately 150,000 gpd of wastewater from these facilities. Treatment includes head works (sequencing, screening, comminution), extended aeration, sedimentation, chemical coagulation, filtration, disinfection using UV. Tertiary effluent is either discharged to Zanja de Cota Creek or it is day stored and then chlorine residual is used for further disinfection before being used to irrigate land on the reservation. Sludge is thickened to between 2-3% solids and then hauled to a licensed waste treatment facility.

III. Receiving Water

The receiving water for Outfall No. 001 for the permitted facility is Zanja de Cota Creek, tributary to the Santa Ynez River, a water of the United States located at latitude 34°, 36', 25" N, longitude 120°, 05', 17" W in Santa Barbara County, California. The applicable water quality standards are specified in the Water Quality Control Plan for the State of California, Region 3, Water Quality Control Board. The applicable water quality standards which have been applied to this water are those for the Santa Ynez River, even though the outfall does not directly discharge into the Santa Ynez River. The beneficial uses designated for the Santa Ynez River are listed in Table 2-1 of the basin plan as MUN, AGR, PRO, IND, GWR, REC-1, REC-2, WILD, COLD, WARM, MIGR, SPWN, RARE, FRESH, NAV and COMM. Applicable narrative water quality standards and numeric water quality standards are described in Section III of the Water Quality Control Plan.

IV. Description of Discharge

The discharge will be tertiary treated municipal wastewater. Disinfection will be by UV disinfection prior to discharge to Zanja de Cota Creek, tributary to the Santa Ynez River. The discharge will meet "California Title 22", "tertiary 2.2" standards.

A. Permit Application Summary

The Permit sought by the Santa Ynez Band of Chumash Indians is for an on-site wastewater treatment plant that will discharge treated effluent to Zanja de Cota Creek, a perennial tributary to the Santa Ynez River. The proposed design flow is 0.2 million gallons or 200,000 gallons a day, and will be discharged on a year-round basis. Some of the treated wastewater may be used on the Reservation for irrigation or non-potable uses. Since this is an application for a new permit not much discharge data, or ambient data is available. However, as required in Section IV of Form 2E the discharger provides estimates for the listed parameters below:

Pollutant or Parameter	Mass (max daily value)	Conc. (max daily value)	Mass (avge daily value)	Conc. (avge daily value)	Number of Measure-ments	Source of Estimate
BOD	75 lbs/ day	50 mg/L	12.5 lbs/ day	10 mg/L	N/A	N/A
TSS	112 lbs day	75 mg/L	12.5 lbs/ day	10 mg/L	N/A	N/A
Fecal Coliform	N/A	240 MPN	N/A	< 2.2 MPN	N/A	N/A

Total Residual Chlorine	N/A	N/A	N/A	N/A	N/A	N/A
Oil and Grease	15 lbs/ day	10 mg/L	6.2 lbs/ day	5 mg/L	N/A	N/A
COD	N/A	N/A	N/A	N/A	N/A	N/A
TOC	N/A	N/A	N/A	N/A	N/A	N/A
Ammonia (as N)	N/A	N/A	N/A	N/A	N/A	N/A
Discharge Flow	0.18 MGD		0.15 MGD		N/A	N/A
pH	6.0 - 9.0		6.0 - 9.0		N/A	N/A
Temp. (Summer)	Unknown		Unknown		N/A	N/A
Temp. (Winter)	Unknown		Unknown		N/A	N/A

B. Discharge Monitoring Report (DMR) Data

As this is a new facility, yet to be constructed, no DMRs available.

V. Effluent Limitations for Conventional Pollutants

Section 301(a) of the Act provides that the discharge of any pollutant to waters of the United States is unlawful except in accordance with an NPDES permit. Section 402 of the Act establishes the NPDES program. The program is designed to limit the discharge of pollutants into waters of the U.S. from point sources (40 CFR 122.1 (b)(1)) through a combination of various requirements including technology-based and water quality-based effluent limitations.

Unless otherwise noted, the following permit limitations must be met when discharging

BOD and Suspended Solids

30-day average - 10 mg/l
7-day average - 15 mg/l

30-day average percent removal: minimum 85%

Mass Limits -

30-day average: (10 mg/l)*(200,000 gal/day)*(1 kg/l x 10^6 mg)*(3.785 l/gal)
= 7.571 kg/day

7-day average: (15 mg/l)*(200,000 gal/day)*(1 kg/l x 10^6 mg)*(3.785 l/gal)
= 11.354 kg/day

Daily maximum (based on Best Professional Judgement)-
2 X (7-day average) = 22.708

Fecal Coliform

Based on California Code of Regulations Title 22 standard for re-use of treated effluent:

30-day geometric mean: 2.2 MPN/100 ml
Single-sample maximum: 2.2 MPN/100 ml

pH

California Regional Board 3, Basin Plan REC-1
Minimum: 6.5
Maximum: 8.3
Maximum change due to discharge: 0.5

VI. Proposed Water-Quality-Based Effluent Limitations for Other Constituents

A. Narrative water quality standards: As stated in Water Quality Control Plan for the State of California, Region 3, Water Quality Control Board, the following narrative water quality standards apply:

1. Waters shall not contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses;

2. Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses;

3. Water shall be free of discoloration that causes nuisance or adversely affects beneficial uses;

4. Water shall not contain floating material in amounts that cause nuisance or adversely affect beneficial uses;

5. Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses;

6. No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses;

7. Radionuclides shall not be present in concentrations that are harmful to human, plant, animal, or aquatic life nor result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life;

8. The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses;

9. Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely affect beneficial uses;

10. Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses;

11. Waters shall not contain taste-or odor producing substances in concentrations that impart undesirable tastes or odors to domestic or municipal water supplies to fish flesh or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses;

12. The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of EPA that such alteration of temperature does not adversely affect beneficial uses;

13. All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal or aquatic life. This objective applies whether the toxicity is caused by a single substance or the interactive effect of multiple substances. Compliance with this objective will be determined by analyses of indicator organisms, species diversity, population density, growth anomalies, and biotoxicity tests of appropriate duration or other methods as specified by EPA;

14. Waters shall not contain taste-or odor producing substances in concentrations that impart undesirable tastes or odors to domestic or municipal water supplies or to fish or other edible products of aquatic origin, or that cause nuisance, or otherwise adversely affect beneficial uses;

15. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses;

B. Numeric Water Quality Standards: Numeric water quality standards are used to calculate limits for parameters above detection and for those expected to be present in the effluent.

The process of "reasonable potential" analysis was used to compare effluent discharges to water quality standards, as required by 40 CFR 122.44(d)(1)(ii), (iii) and (iv) which states:

> When determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria for a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing, and where appropriate, the dilution of the effluent in the receiving water. The procedures used to determine reasonable potential are outlined in *Technical Support Document for Water Quality-based Toxics Control (TSD)* (EPA/502/2-90-001).

When the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a numeric criterion for a State water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant.

When the permitting authority determines that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the numeric criterion for whole effluent toxicity, the permit must contain effluent limits for whole effluent toxicity.

Table 1 of the permit reproduced on the next page summarizes proposed technology-based effluent limitations for Outfall No. 001. When properly operated, this wastewater treatment system should meet the limitations in Table 1.

Table 1. Technology-Based Effluent Limitations

Effluent Characteristic	Discharge Limitations						Monitoring Requirements	
	Mass limits			Concentration limits				
	Average Monthly	Average Weekly	Daily Maximum	Average Monthly	Average Weekly	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)(5)	N/A(1)	N/A	0.20	(2)	(2)	(2)	Once/day	N/A
Ammonia (as N)	(2)	N/A	(2)	(2)	N/A	(2)	(2)	Discrete
Biochemical Oxygen Demand (5-day)(3)	7.6 kg/day	11.35 kg/day	22.7 kg/day	10 mg/L	15mg/L	(2)	Once/week	Composite
Fecal Coliform Bacteria	N/A	N/A	N/A	2.2 MPN/ 100 ml	N/A	2.2 MPN/ 100 ml	Once/month	Discrete
Total Nitrogen (as N)	(2)	N/A	(2)	5 mg/L	N/A	7.5 mg/L	Once/month	Discrete
Total Residual Chlorine (TRC)	(2)	(2)	(2)	(2)	(2)	(2)	(4)	Discrete
Suspended Solids(3)	7.6 kg/day	11.35 kg/day	22.7 kg/day	10 mg/L	15mg/L	(2)	Once/week	Composite
Total Phosphorous (as P)	(2)	N/A	(2)	(2)	N/A	(2)	Once/month	Discrete
pH	Not less than 6.5 standard units and not greater than 8.3 standard units. The discharge shall not cause the pH of the receiving water to change more than 0.5 standard units.						Once/day	Discrete

(1) N/A = Not Applicable

(2) Monitoring and reporting required. No limit set at this time.

(3) Both the influent and the effluent shall be monitored. The arithmetic mean of the Biochemical Oxygen Demand (5-day) by concentration, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the values, by concentration, for influent samples collected at approximately the same times during the same period.

(4) TRC shall be monitored at weekly intervals to verify adequate removal of chlorine prior to discharge to the receiving water or reuse, when chlorine is used to disinfect the effluent.

(5) Flow is defined as "Maximum annual dry weather design capacity" as defined in Item 6, Page 9 of the Permit.

C. Screening of Priority Toxic Pollutants

The discharger must conduct a comprehensive screening test for the Priority Toxic Pollutants listed for the California Toxics Rule in the Code of Federal Regulations (CFR) at 40 CFR Section 131.38, within 90 days of the issuance of the permit. If an exceedence of the limits, or a reasonable potential for exceedence of such limits is detected, further testing of that or those particular compound(s) must be undertaken within 90 days to determine the cause of exceedence or potential exceedence and this permit may be re-opened to require appropriate limits.

VII. Monitoring Requirements

A. Flow Quantity, Organics, and Inorganics

The permit requires daily flow monitoring and weekly and monthly monitoring for the technology-based parameters noted in VII.B. Table 1 also indicates requirements for the type of sample to be collected, i.e., discrete or composite.

B. Technology-Based Limitations and Indicator Parameters

Technology-based and indicator parameters will be monitored to ensure proper operational control of the facility. pH will be monitored daily, BOD and suspended solids will be monitored weekly and fecal Coliform and other parameters will be monitored monthly.

Some operationally related parameters will also be monitored to ensure compliance with water quality standards. Monitoring for TRC is proposed at weekly intervals to verify adequate removal of chlorine prior to discharge to the receiving water, when chlorine treatment of the effluent is used.

VIII. Threatened and Endangered Species

EPA reviewed the List of Listed, Proposed and Candidate Species that occur in Santa Barbara County, California which can be found on the web site of the Ventura Office of the United States Fish and Wildlife Service at: www.ventura.fws.gov

EPA used this list along with the Documents prepared by Analytical Environmental Services (AES) entitled Final Chumash Casino Consolidation Project Environmental Evaluation, dated July 2002 and Assessment of Effects of Treated Wastwater Effluent on Aquatic Habitats, dated March 2002. EPA also reviewed the Lower Santa Ynez River Fish Management Plan, Public Review Draft, dated April 10, 1999 prepared for the Santa Ynez River Technical Advisory Committee to determine whether the discharge would affect any endangered species or habitat. The review indicated that the following twenty non-plant Threatened and Endangered Species are present in mainland Santa Barbara County, California, according to the latest information on from the United States Fish and Wildlife Service's Ventura Office.

Mammals: San Joaquin Kit Fox (*Vulpes macrotis mutica*), Giant Kangaroo Rat (*Dipodomys ingens*), Southern Sea Otter (*Enhydra lutris nereis*)

Birds: California Condor (*Gymnogyps califroniaus*), Bald Eagle (*Haliaeetus leucocephalus*), Brown Pelican *(Pelecanus Occidentalis)*, California Least Tern (*Sterna antillarum browni*),

Least Bell's Vireo (*Vireo bellii pusillus*), Western Snowy Plover (*Charadrius alexandrinus nivosus*), Southwestern willow flycatcher (*Empidonax trailli extimus*), Light-footed Clapper Rail (*Rallus longirostris levipes*)

Amphibians: Arroyo Toad (*Bufo Californicus*), California Red-legged Frog (*Rana aurora draytonii*), California Tiger Salamander (*Ambystoma californiense*)

Reptiles: Blunt-nosed Leopard Lizard (*Gambelia silus*),

Invertebrates: Vernal pool Fairy Shrimp (*Branchinecta lynchi*), Longhorn Fairy Shrimp *(Branchinecta longientenna*)

Fish: Tidewater Goby (*Eucylogobius newberryi*), Southern California Steelhead (*Oncorhynchus mykiss irideus*), Unarmored Threespine Stickleback (*Gasterosteus aculeatus williamsoni*)

Of the three mammals listed, none has any nexus with Zanja de Cota Creek, beyond speculative incidental contact.

Of the eight birds listed, none has any nexus with Zanja de Cota Creek, beyond speculative incidental contact.

The one reptile listed, has no nexus with Zanja de Cota Creek beyond speculative incidental contact.

Of the two invertebrates listed, none has any nexus with Zanja de Cota Creek, beyond speculative incidental contact.

Of the three amphibian species listed, the Arroyo Toad is found only in Santa Ynez River tributaries upstream of Lake Gibralter, and thus has no nexus beyond speculative incidental contact with the Zanja de Cota Creek, which is a tributary that is significantly downstream of Lake Gibralter. The California Salamander has no nexus beyond speculative incidental contact with Zanja de Cota Creek. The California Red-legged Frog, while found in other tributaries to the Santa Ynez River, is not known in the literature to be present in the Zanja de Cota Creek, and thus has no nexus beyond speculative incidental contact with Zanja de Cota Creek.

Of the three fish species, the Tidewater Goby is found in Lagoons at the mouth of the Santa Ynez River, and has no nexus with the Zanja de Cota Creek. The Unarmored Threespine Stickleback is found in the freshwater portions of the Santa Ynez River River upstream and downstream of Zanja de Cota Creek, but it is not known to be found in Zanja de Cota Creek. The Stickleback thus has no nexus beyond speculative incidental contact with Zanja de Cota Creek. The Southern California Steelhead's historical spawning habitat included Zanja de Cota Creek. However, construction of the concrete spillway located at the west end of the Gainey Reservoir created an impassable barrier to migratory anadromous fish species (i.e. the Steelhead) and Zanja de Cota creek upstream from the Gainey Reservoir does not currently support

spawning Steelhead populations.

This permit authorizes the discharge of tertiary treated sanitary wastewater into Zanja de Cota Creek which, as outlined above, is not habitat for the aforementioned threatened and endangered species. The draft permit contains provisions for monitoring conventional pollutants, toxic chemicals, and nonconventional pollutants, in compliance with Federal and Water Quality Control Plan for the State of California, Region 3, Water Quality Standards, to ensure an appropriate level of quality of water discharged by the facility. Re-opener clauses have been included should new information become available to indicate that the requirements of the permit need to be changed.

In considering all information available during the drafting of this permit, EPA believes that a No Effect determination is appropriate for this federal action. A copy of the draft fact sheet and permit will be forwarded to the Ventura Field Office of the United States Fish and Wildlife Service for review and comment prior to and during the 30-day public review period.

IX. Administrative Information

A. Public Notice (40 CFR Part 124.10)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft NPDES permit or other significant action with respect to a NPDES permit or application. The basic intent of this requirement is to ensure that all interested parties have an opportunity to comment on significant actions of the permitting agency with respect to a permit application or permit.

This permit will be public noticed in a local newspaper.

B. Public Comment Period (40 CFR Part 124.10)

Regulations require that NPDES permits be noticed in a daily or weekly newspaper within the area affected by the facility or activity and provide a minimum of 30 days for interested parties to respond in writing to EPA.

After the closing of the public comment period, EPA is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

C. Public Hearing (40 CFR Part 124.12 (c))

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the

hearing. A public hearing will be held when there is a significant amount of interest expressed during the 30-day public comment period or when it is necessary to clarify the issues involved in the permit decision.

X. Additional Information

Additional information relating to this proposed permit may be obtained from either of the following location(s):

U.S. Environmental Protection Agency, Region IX
CWA Standards & Permits Office Mail Code: WTR-5
75 Hawthorne Street
San Francisco, California 94105
Telephone: (415)972-3516
Gary Sheth

XI. Information Sources

While developing effluent limitations, monitoring requirements and special conditions for the draft permit, the following information sources were used:

1. NPDES Permit Application Forms: EPA General Form 1, dated July 9, 2002, Standard Form 2A, dated July 9, 2002 and 2E dated July 9, 2002.

2. 40 CFR Part 131.38 Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California.

3. 40 CFR Parts 122, 124, and 133.

4. EPA Technical Support Document for Water Quality-Based Toxics Control dated March, 1991.

5. Endangered and Threatened Species of California.

6. EPA NPDES Permit Writers Manual. EPA-833-B-96-003. December 1996.

7. Assessment of Effects of Treated Wastewater Effluent on Aquatic Habitats. Chumash Casino Consolidation Project Santa Barbara County, California. Prepared by Analytical Environmental Services (AES). March 2002.

8. Final Chumash Casino Consolidation Project Environmental Evaluation. Prepared by Analytical Environmental Services (AES). July 2002

9. Water Quality Control Plan. Central Coast Region. September 1994.

10. United States Fish and Wildlife Service, Ventura Field Office Web Site. www.ventura.fws.gov